4-002 OJAI VALLEY

Basin Boundaries

Summary

The Ojai Valley groundwater basin is located in the central-western portion of Ventura County. The basin is bound on the north by consolidated rocks of the Topatopa Mountains. The easternmost portion of the basin is separated from the adjacent Upper Ojai Valley groundwater basin by the San Cayetano fault. The basin is bound on the south by the Santa Ana fault and the consolidated rocks of Black Mountain. A surface water divide and a subsurface bedrock ridge that forms a groundwater divide separates the basin from the adjoining Upper Ventura River subbasin to the west.South of the Santa Ana fault, thin terrace deposits underlain by bedrock and lacking direct subsurface hydraulic connection with the basin are excluded from the basin. These alluvial terrace deposits have little to no significant groundwater storage capacity.The basin is drained by Thacker and San Antonio Creeks -- tributaries to the Ventura River. Average annual precipitation ranges from 20 to 24 inches.The boundary is defined by 13 segments detailed in the descriptions below.

Segment Descriptions

Segment Label	Segment Type	Description	Ref
1-2	E Alluvial	Begins from point (1) and crosses the Quaternary alluvium to point (2).	{a}
2-3	E Alluvial	Continues from point (2) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks to point (3).	{b}
3-4	E Alluvial	Continues from point (3) and crosses Quaternary alluvium to point (4).	{a}
4-5	E Alluvial	Continues from point (4) and follows the contact of Quaternary alluvium with Tertiary Cozy Dell Shale to point (5).	{b}
5-6	E Alluvial	Continues from point (5) and crosses Quaternary alluvium to point (6).	{a}
6-7	E Alluvial	Continues from point (6) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks to point (7).	{b}
7-8	I Fault	Continues from point (7) and follows the San Cayetano fault to point (8).	{c}
8-9	E Alluvial	Continues from point (8) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks to point (9).	{b}
9-10	E Fault	Continues from point (9) and follows the Santa Ana fault to point (10).	{a}
10-11	E Alluvial	Continues from point (10) and follows the contact of Quaternary alluvium with Sespe Formation to point (11).	{d}
11-12	I Groundwater Divide	Continues from point (11) and follows a subsurface bedrock ridge and a surface divide to point (12).	{a}
12-1	E Alluvial	Continues from point (12) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks and ends at point (1).	{d}

13-13	E Alluvial	Island within the basin boundary: begins from point (13) and follows the contact of the Quaternary alluvium with Coldwater Sandstone and Cozy Dell Shale and ends at point (13).	{b}

Significant Coordinates

Point	Latitude	Longitude
1	34.478450793	-119.254761878
2	34.478452261	-119.253960199
3	34.478005123	-119.215409106
4	34.477954846	-119.214341855
5	34.478460727	-119.196917412
6	34.478300258	-119.19480887
7	34.452385212	-119.157425748
8	34.451419976	-119.160576289
9	34.438199307	-119.234069884
10	34.433549061	-119.249251927
11	34.437432018	-119.254670854
12	34.44740611	-119.263274675
13	34.472303032	-119.216908514

Map

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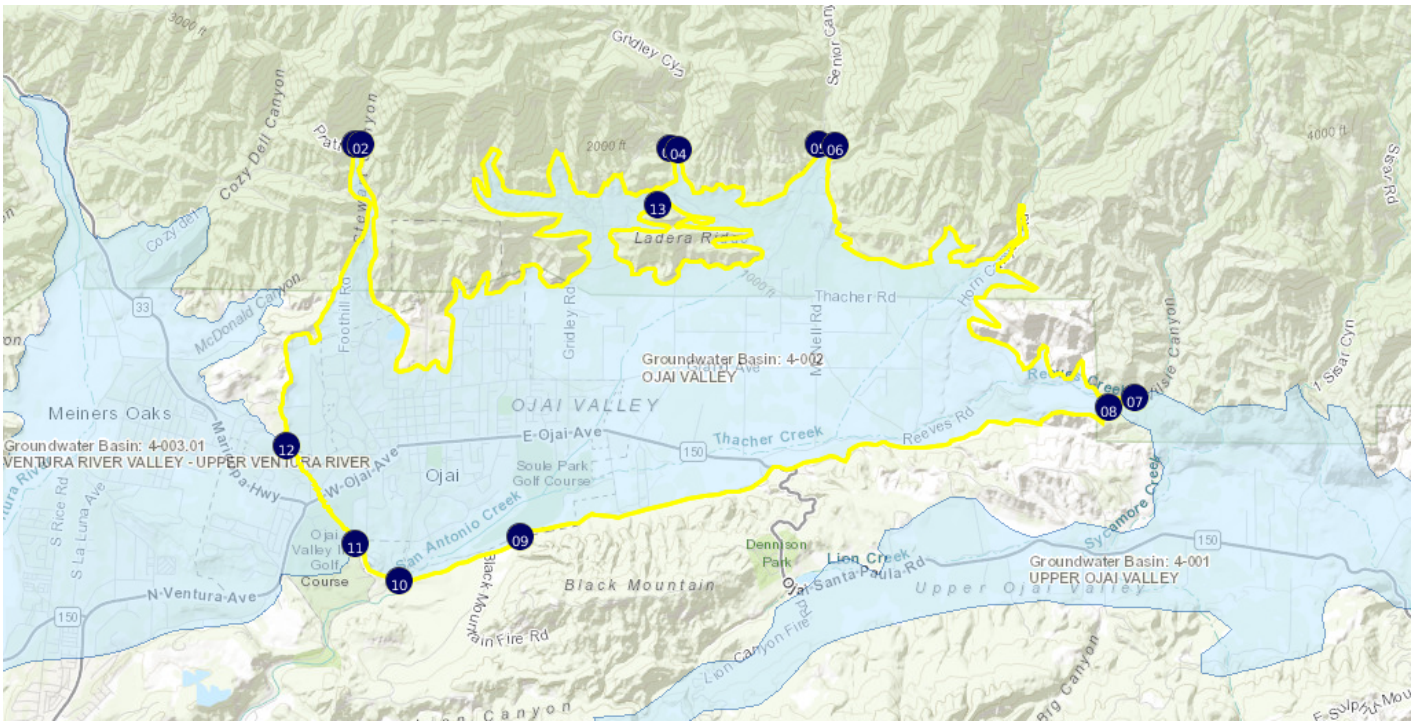

https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=4-002

References

Ref	Citation	Pub Date	Global ID
{a}	BBMRS	varies	45
{b}	California Department of Conservation, California Geologic Society (CGS), Geologic Map of the Ojai 7.5' Quadrangle, Ventura County, California: A Digital Database, Version 1.0, 1:24,000, S.S. Tan, P.J. Irvine, C.I. Gutierrez.ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim_geo_pdf/Ojai_prelim.pdf	2005	78
{c}	California Geological Survey (CGS), Geologic Atlas of California Map No. 008, Los Angeles Sheet, , 1:250,000, Charles W. Jennings and Rudolph G. Strand.URL: http://www.quake.ca.gov/gmaps/GAM/losangeles/losangeles.html	1969	33
{d}	California Geological Survey (CGS), Geologic Map of the Matilija Quadrangle, 1:24,000, S.S. Tan and T.A. Jones.URL: http://www.conservation.ca.gov/cgs/rghm/rgm/Pages/preliminary_geologic_maps.aspx	2006	51

Footnotes

- I: Internal
- E: External